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(54) Title: TOILETRIES COMPOSITION

(57) Abstract

Skin cleansing compositions comprise an absorbent material to absorb soil, grease and oils from the skin, and a molecular sieve to act as a heat generating component in an anhydrous diluent or carrier.

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TOILETRIES COMPOSITION

The present invention relates to skin cleansing compositions and in particular to skin cleansing compositions, such as face masks, which contain an absorbent material to absorb soil, grease and oils from the skin.

The present invention provides a skin cleansing composition which comprises 3 to 60% by weight of one or more absorbent materials and 0.5 to 80% by weight of molecular sieve together with an anhydrous diluent or carrier. The term "anhydrous" as used herein means that there should not be enough water present to significantly effect the performance of the compositions of the present invention. It will be appreciated by those skilled in the art that many components commonly used in cosmetic and toiletries compositions do contain some water. The use of such components in the compositions of the present invention is not precluded provided that the performance of the compositions is not jeopardised.

Suitable absorbent materials include kaolin, Fullers earth, china clay, bentonite and mixtures thereof. In preferred skin cleansing compositions, the absorbent material comprises 10 to 35% of the composition by weight. The above absorbent may optionally be mixed with one or more additional absorbents selected from zinc oxide, magnesium oxide, aluminium oxide, magnesium aluminium silicate for example as sold under the trade name Veegum, starches such as potato starch, magnesium carbonate, mica, silicas, talc, Kieselguhr and grain meals for example meals derived from oat, rye, wheat, barley or corn. Such additional absorbents may comprise up to 20% of the skin cleansing composition by weight.

Suitable molecular sieves for use in the skin cleansing compositions of the present invention are natural zeolites or synthetically produced crystalline alumino-silicates that have been activated by removing their water of hydration. Suitable molecular sieves are available commercially (e.g. Molecular Sieve 3A from Union Carbide). In preferred skin cleansing compositions the molecular sieve comprises 20 to 35% by weight of the composition. Heretofore molecular sieves have had wide utility in the absorption of gases and liquids. In the compositions the molecular sieve absorbs water from the skin onto which the compositions are placed and in the process heat of hydration (absorption) is liberated. This heat opens the pores of the skin to enable any soil, grease or oil to be released so that it is more easily absorbed by the absorbent material in the composition. In addition, the heat increases the blood circulation under the skin and causes a feeling of well-being in the user.

The skin cleansing compositions of the present invention may also contain one or more other materials which generate heat when contacted by moisture in the skin. Examples of other materials which generate heat in this way include glycols, such as polyethylene glycol and 1,3-butylene glycol, glycerin, methyl glyceth and copolymers of ethylene and propylene oxide for example those sold by Union Carbide under the trade name Ucon Fluid. These other heat generating materials may comprise up to 85% of the skin cleansing compositions of the present invention.

Other materials may be included in the skin cleansing compositions of the present invention. Such materials include suspending agents such as pyrogenic silica; humectants such as glycerin thickening agents

such as carboxymethyl cellulose or other gums; cosmetically acceptable oils such as almond oil which aid the removal of oily soil from the skin; materials which enhance the feel of the composition and aid its application such as talc or silk powder; cosmetically acceptable surfactants such as polyethoxylated glyceryl laurate or polyethoxylated sorbitol [such as the POE (30)-sorbitol sold under the trade name Atlas G2330]; colouring agents and perfumes.

In use the skin cleansing composition of the present invention is spread on the skin, typically the face, and removed after the desired time period, typically 2 to 15 minutes for example by washing. During this time period the molecular sieve and any other heat generating components which may be present adsorb water from the skin. The heat of hydration liberated during this adsorption raises the temperature of the skin to increase the blood flow below the skin and to open the skin pores to facilitate the removal of soil, grease and oil from the skin . If the skin cleansing composition of the present invention is applied to skin which has been previously wetted with water, for example by rinsing, washing or steaming, the heat liberation occurs quickly after application and the user will be aware of a rapid rise in temperature. If the skin cleansing composition is applied to skin which has not been wetted, the heat generating components will absorb moisture from the skin causing the temperature to rise more slowly.

In one embodiment of the present invention the skin cleansing composition of the present invention is supplied to the user as the second part of a two part skin cleansing system. The first part of such a system may comprise an aromatic water-dispersible oil which is dispersed in very hot water. The skin to be cleansed is

then steamed over this infusion before a skin cleansing composition of the present invention is applied to the skin as the second part of the system.

The invention will now be illustrated by the following description of skin cleansing compositions which are given by way of example only. In Tables I and II all percentages are by weight.

In each Example hereinafter the ability of compositions to generate heat is illustrated by the following experiment. A sample (10 g) of the skin cleansing composition at around 25°C was mixed with water (3 ml) at around 15°C. The maximum temperature attained was then recorded and is shown in the following Tables.

TABLE I

	Ex.1	Ex.2	Ex.3	Ex.4	Ex.5
Molecular Sieve 3A	35	30	25	50	1
Heavy Kaolin BP	12.5	15	20	5	20
Titanium Dioxide coated with alumina, silica and trimethylolpropane (sold under the trade name Tioxide R-TC4)	1	1	2	1	1
1,3-butyleneglycol	15	17	13	9	43
polyethyleneglycol 400	10	10	10	10	10
methylgluceth-10 (sold under the trade name Glucam E-10)	10	10	10	10	10
glycerine BP	5	5	5	5	5
PEG-15 glyceryl laurate (sold under the trade name Glycerox L15)	0	0	8	0	0

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TABLE I

	Ex.1	Ex.2	Ex.3	Ex.4	Ex.5
pyrogenic silica (sold under the trade name Aerosil 200)	2	2	2	2	2
polyethoxylated sorbitol (sold under the trade name Atlas G2330)	5	5	5	5	5
siliconised talc (sold under the trade name Talc Extra Cartwright Siliconised)	2	0	0	2	2
carboxymethyl cellulose	1	5	0	1	1
Almond Oil	0.5	0	0	0	0
Natural Silk Powder	0.5	0	0	0	0
Colouring, Perfumes	0.5	0	0	0	0
Maximum Temperature (°C)	45-48	46-47	42-44	56-58	32

Continuation of Table.

TABLE II

	Ex.6	Ex.7	Ex.8
Molecular Sieve 3A	80	80	5
Heavy Kaolin BP	15	15	12
Polyethyleneglycol 400	5	0	0
Copolymer of ethylene and propylene oxide (Ucon Fluid 50-HB-600)	0	0	3
Volatile Silicone (345DC)	0	5	0
Maximum Temperature	78	83	33

CLAIMS

1. A skin cleansing composition comprising 3 to 60% by weight of one or more absorbent materials and 0.5 to 80% by weight of molecular sieve together with an anhydrous diluent or carrier.

2. A skin cleansing composition as claimed in claim 1 wherein the absorbent material comprises 10 to 35% by weight of the composition, and is selected from kaolin, Fullers earth, china clay, bentonite or mixtures thereof.

3. A skin cleansing composition as claimed in claim 1 wherein the molecular sieve comprises 20 to 35% by weight of the composition.

4. A skin cleansing composition as claimed in claim 2 which comprises up to 20% by weight of an additional absorbent.

5. A skin cleansing system comprising two parts, the first of which comprises an aromatic water-dispersible oil and the second of which comprises a composition as claimed in any preceding claim.

6. A method of cleansing skin comprising the steps of spreading a skin cleansing composition, as claimed in any one of claims 1 to 4, on the skin, leaving it for 2 to 15 minutes, then removing the composition by washing.

7. A method of cleansing skin comprising the steps of steaming the skin over an infusion consisting of an aromatic water-dispersible oil dispersed in very hot water, followed by application to the skin of a skin cleansing composition as claimed in any one of claims 1 to 4.

INTERNATIONAL SEARCH REPORT

International Application No PCT/EP 92/02495

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all)[6]

According to International Patent Classification (IPC) or to both National Classification and IPC

Int.Cl. 5 A61K7/48

II. FIELDS SEARCHED

Minimum Documentation Searched[7]

Classification System	Classification Symbols
Int.Cl. 5	A61K

Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched[8]

III. DOCUMENTS CONSIDERED TO BE RELEVANT[9]

Category[9]	Citation of Document,[11] with indication, where appropriate, of the relevant passages[12]	Relevant to Claim No.[13]
X	US,A,3 260 680 (MENKART ET AL.) 10 May 1966 see the whole document	1-3,6
X	WO,A,8 605 389 (PRODUCT RESOURCES INTERNATIONAL INC.) 25 September 1986 see claims 1-31; examples 1-7	1,3,6
A	CHEMICAL ABSTRACTS, vol. 92, no. 2, January 1980, Columbus, Ohio, US; abstract no. 11222z, TSUCHIYA 'zeolite containing powders' see abstract & JP,A,54 073 134 (TSUCHIYA)	1-3,6

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[9] Special categories of cited documents:[10]

"A" document defining the general state of the art which is not considered to be of particular relevance

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IV. CERTIFICATION

Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report
18 FEBRUARY 1993	04. 03. 93
International Searching Authority	**Signature of Authorized Officer**
EUROPEAN PATENT OFFICE	FISCHER J.P.

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III. DOCUMENTS CONSIDERED TO BE RELEVANT (CONTINUED FROM THE SECOND SHEET)

Category °	Citation of Document, with indication, where appropriate, of the relevant passages	Relevant to Claim No.
A	FR,A,2 106 584 (GENERAL CHEMICALS AND COSMETICS LIMITED) 5 May 1972 see the whole document -----	1-2,4,6

Form PCT/ISA/210 (extra sheet) (January 1985)

ANNEX TO THE INTERNATIONAL SEARCH REPORT ON INTERNATIONAL PATENT APPLICATION NO.

EP 9202495
SA 66240

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report.
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Patent document cited in search report	Publication date	Patent family member(s)		Publication date
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		GB-A-	1357000	19-06-74

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